

FIG. 1

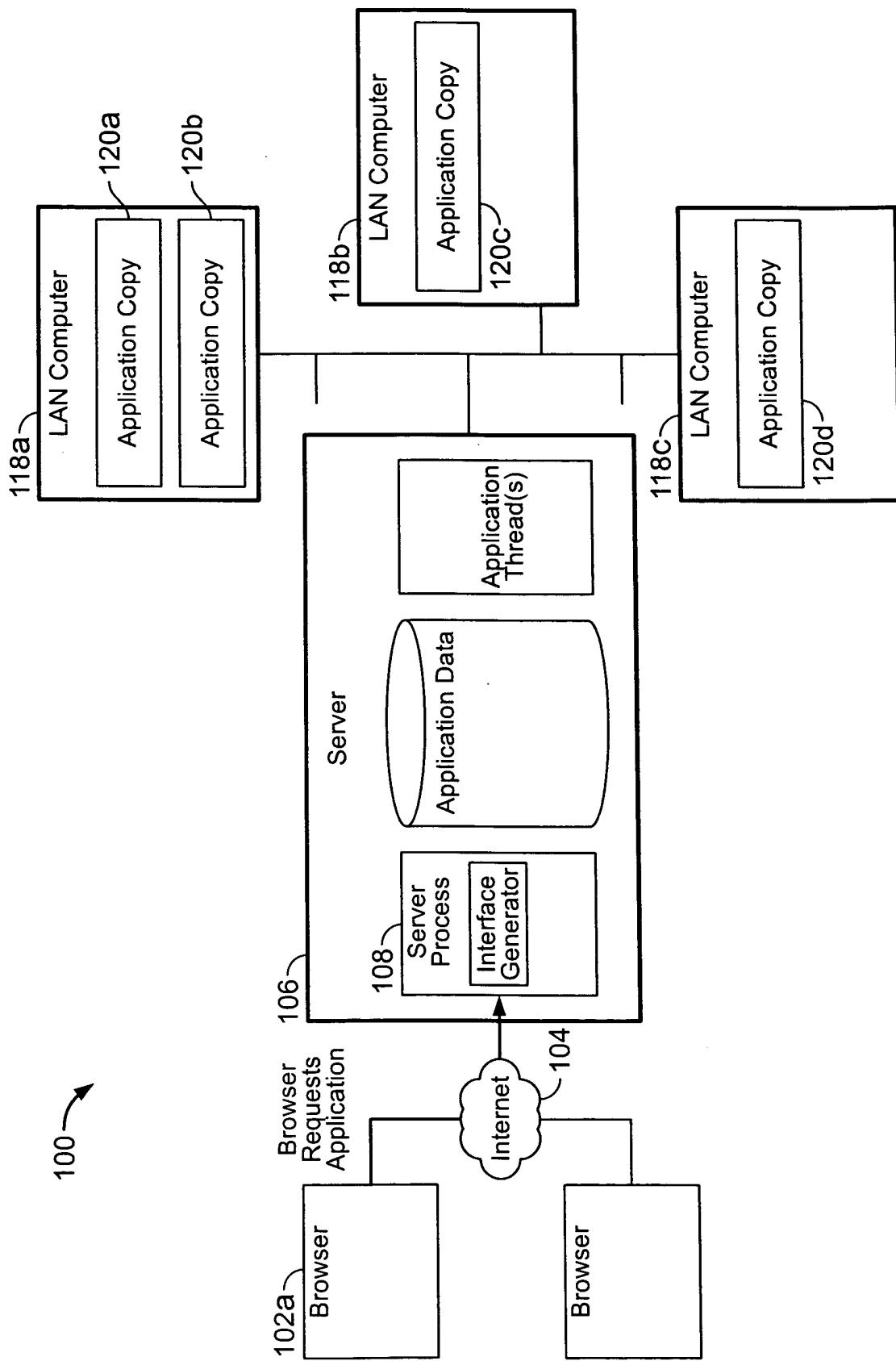


FIG. 2

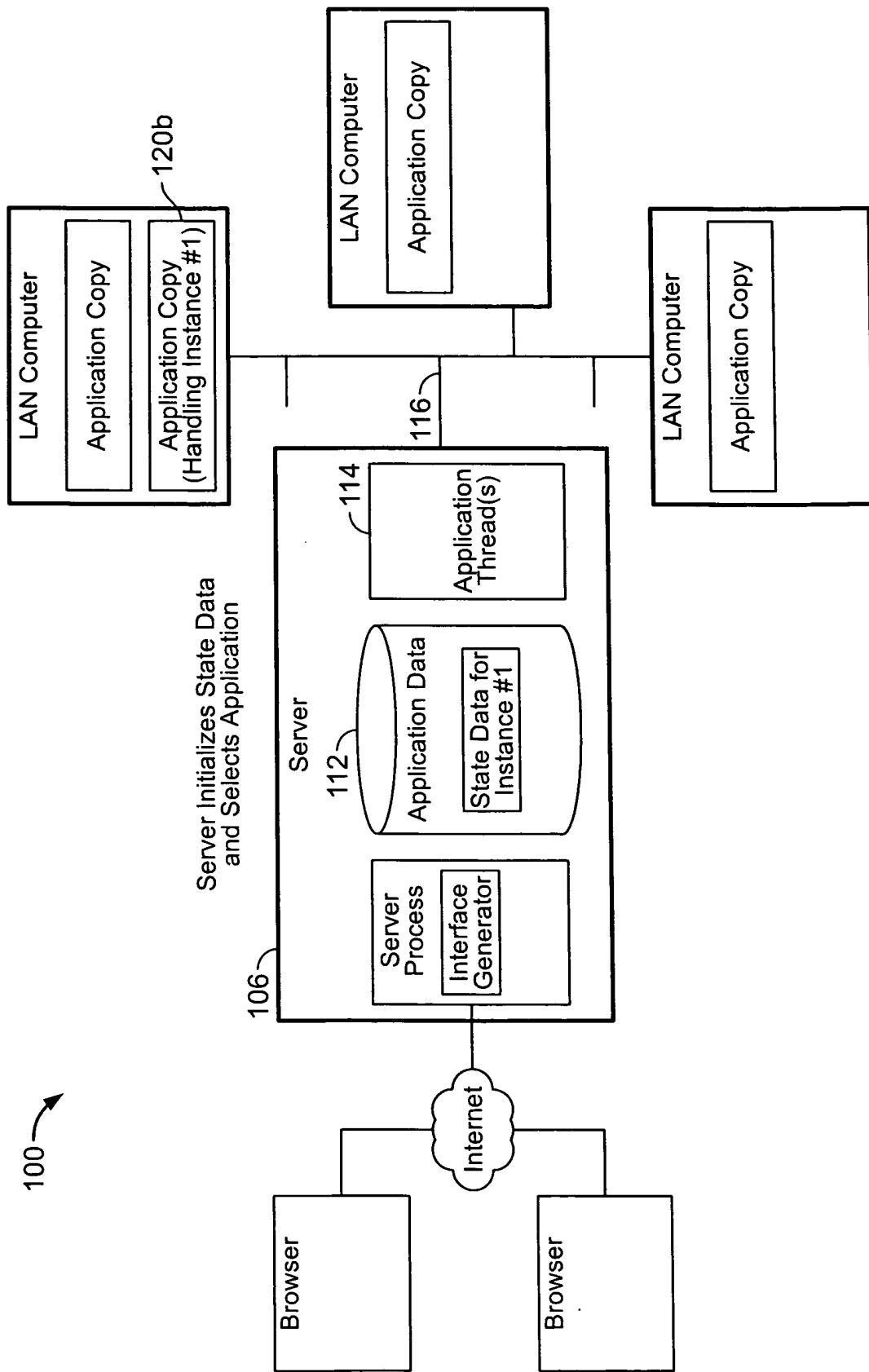
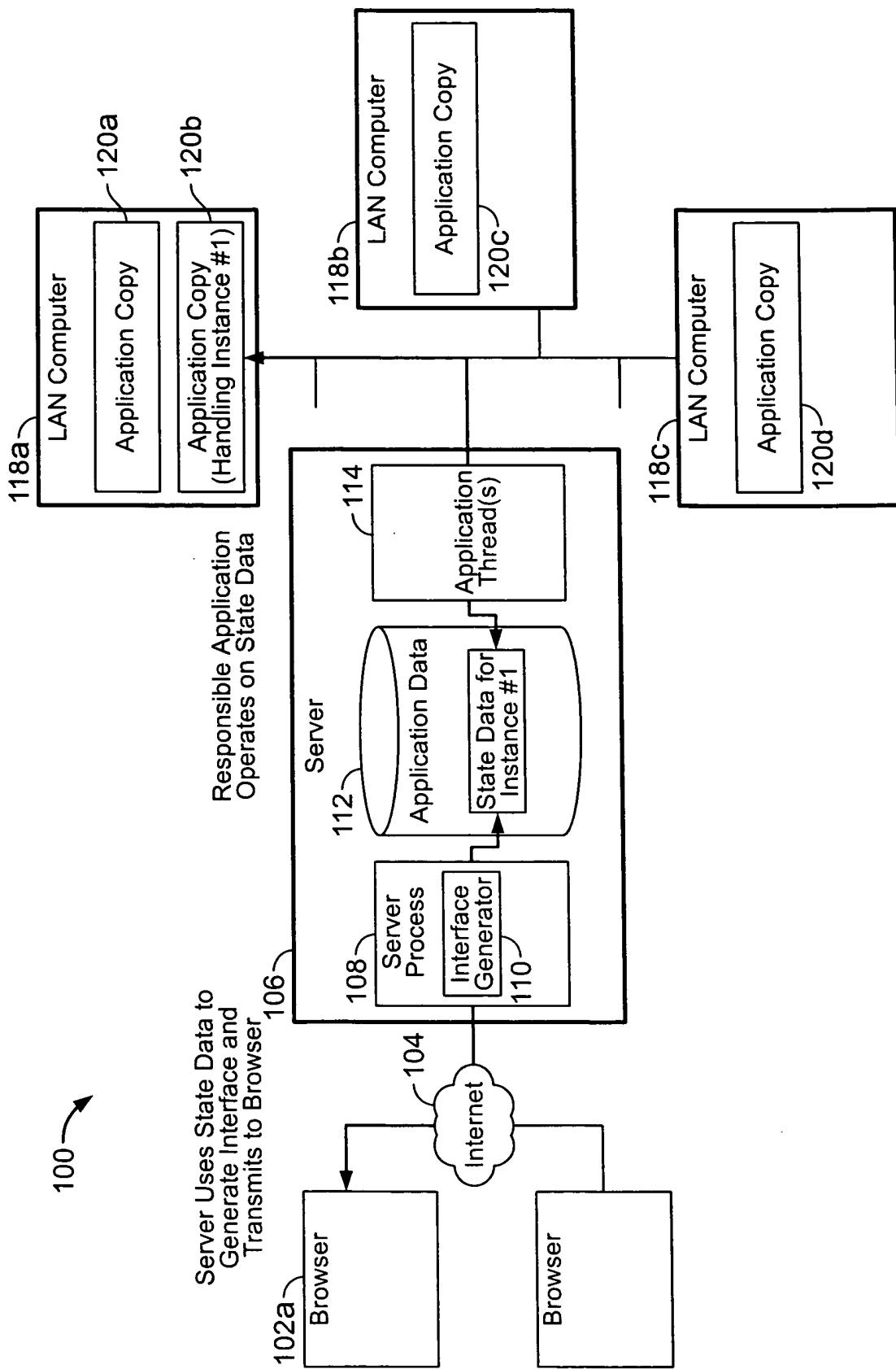


FIG. 3



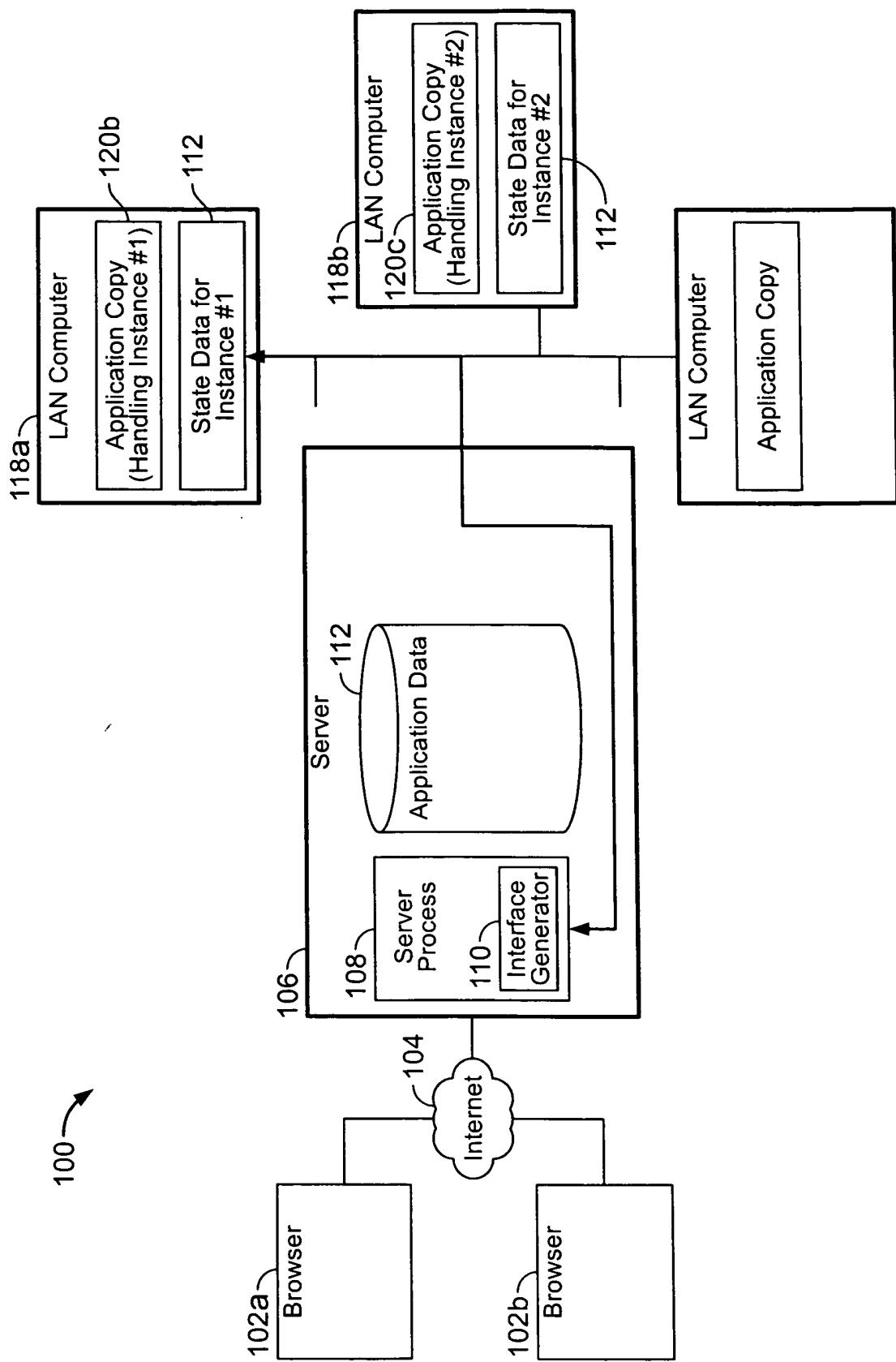


FIG. 5

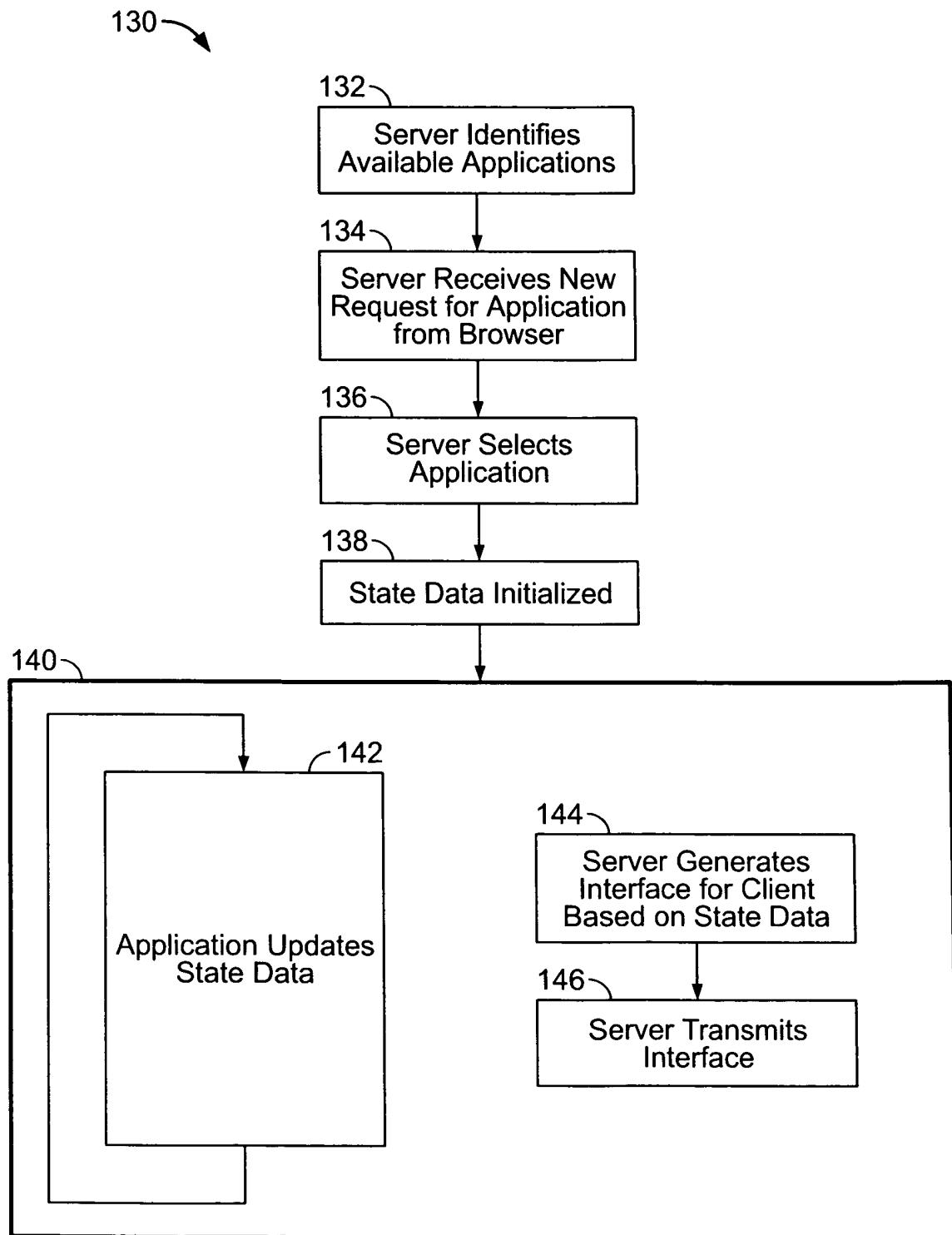


FIG. 6

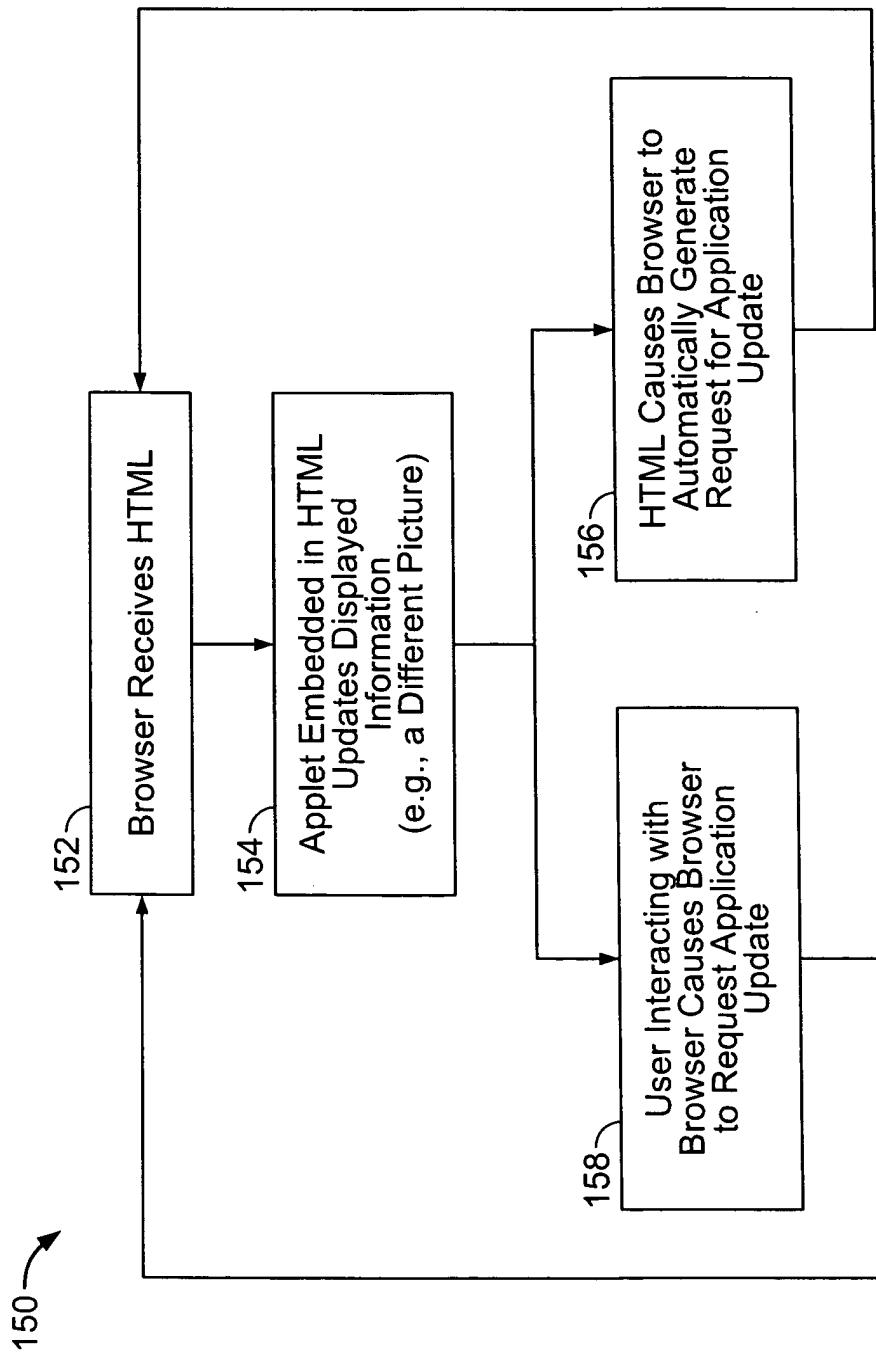


FIG. 7

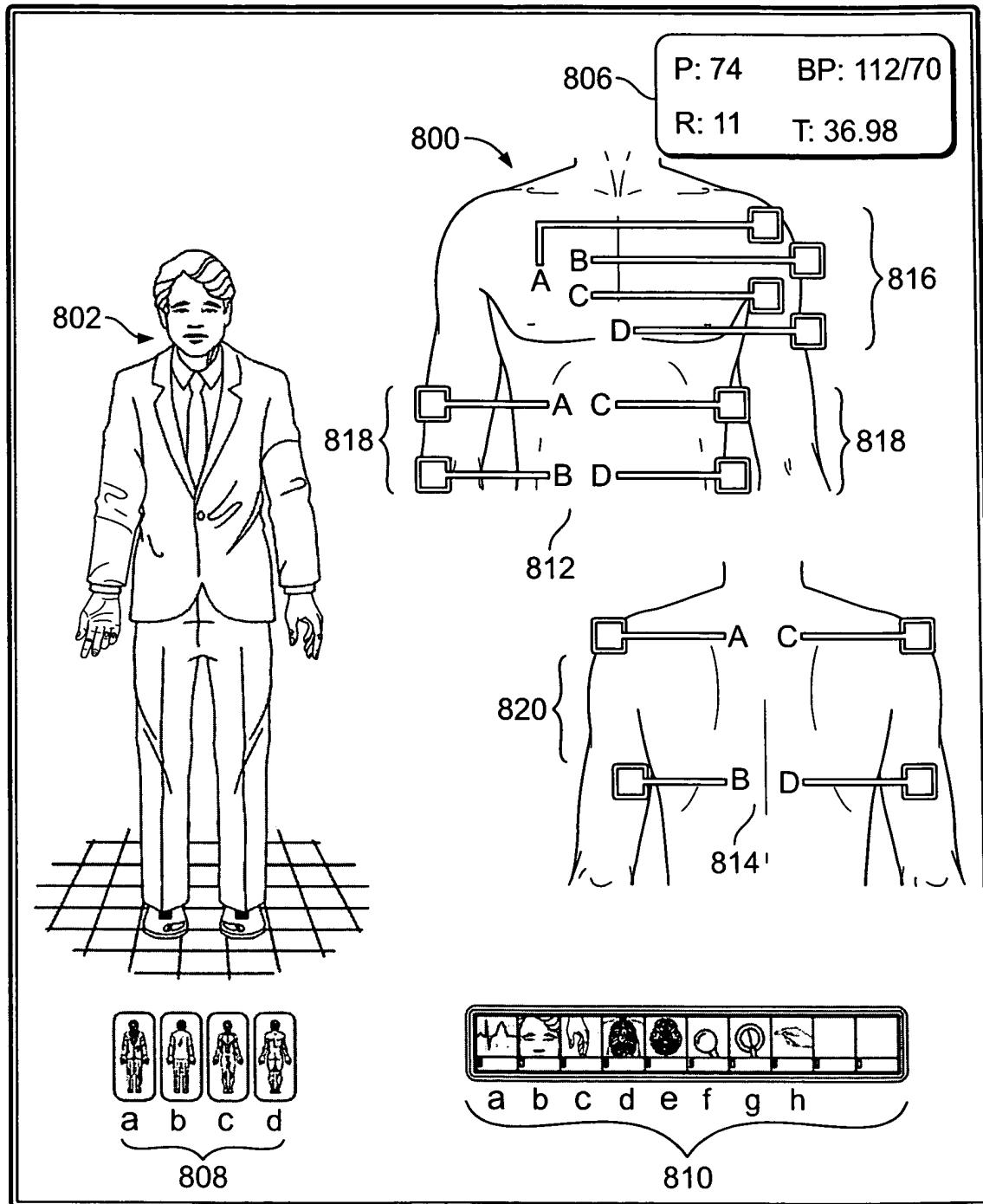


FIG. 8

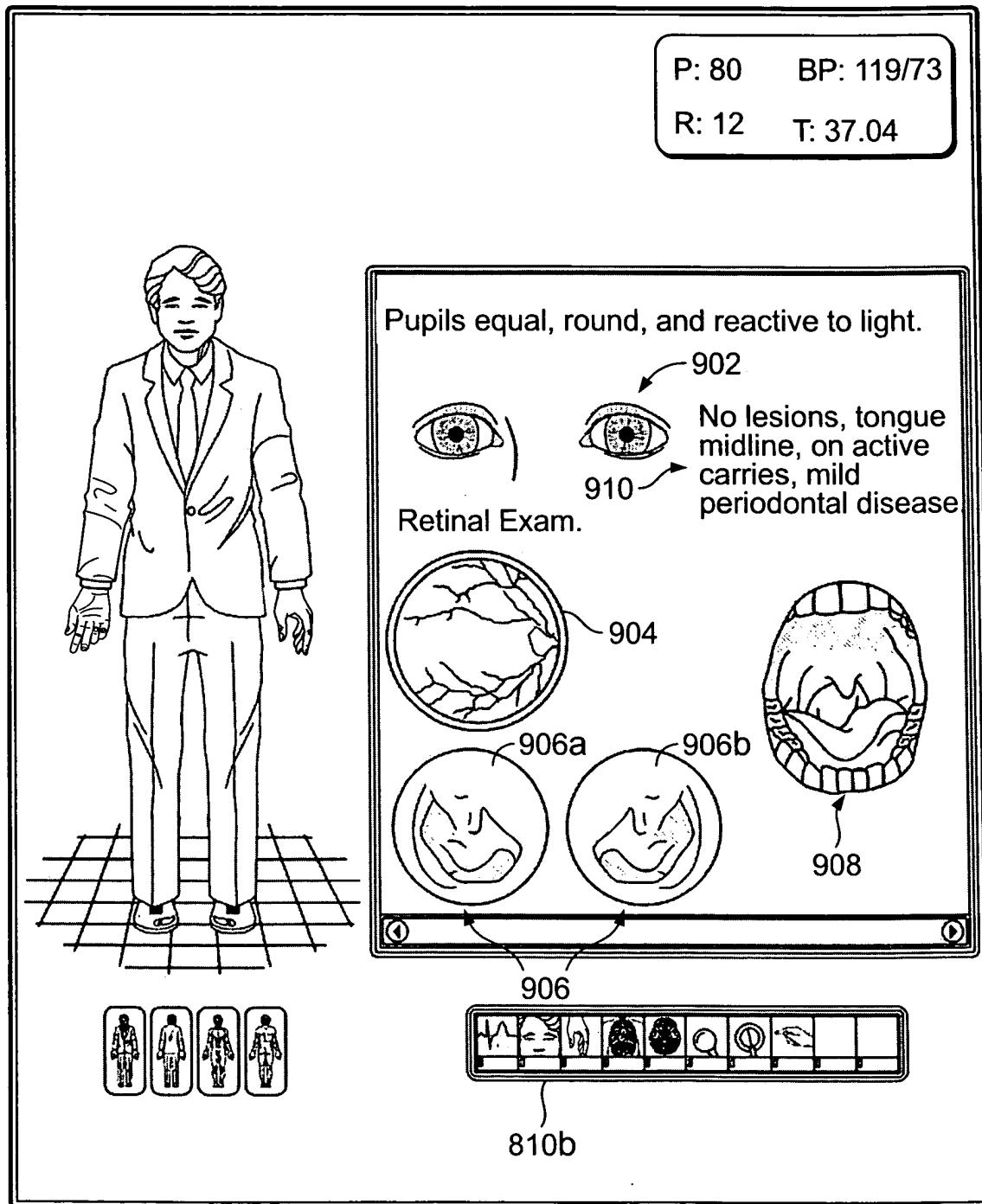


FIG. 9

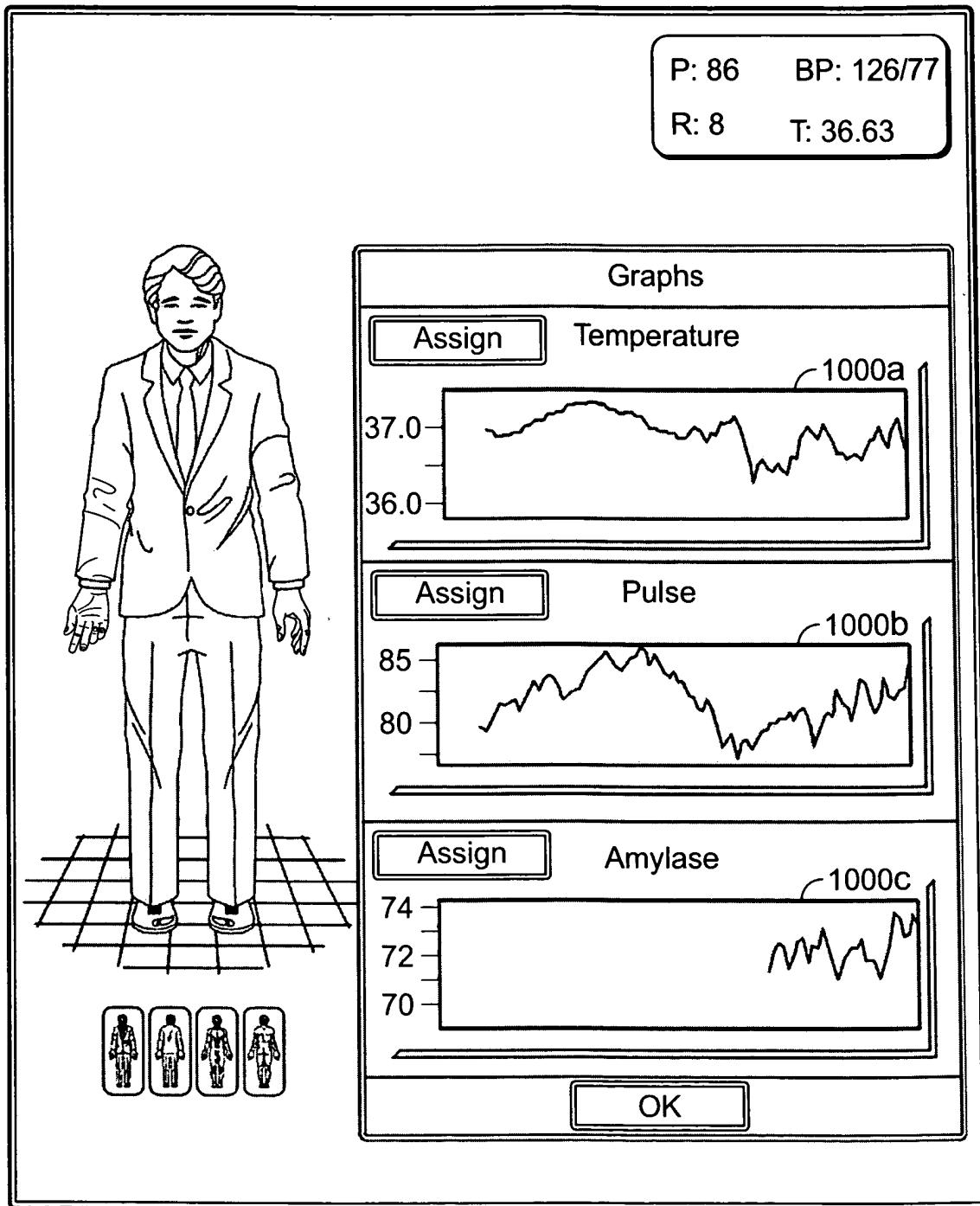


FIG. 10

<p>P: 72 BP: 114/71 R: 11 T: 36.98</p>																																															
<table border="1"><tr><td>OHx</td><td>OPx</td><td>OROS</td><td>OOrd</td><td>OLab</td><td>OProg</td></tr><tr><td colspan="6">Patient History</td></tr><tr><td colspan="6"><p>Sudden, unexplained increase in thirst and appetite accompanied by abnormally frequent urination and weight loss of 2 pounds, starting approximately one month ago.</p></td></tr><tr><td colspan="6"><p>The patient is a 31 y/o moderately obese white male who presented with a one month history of unexplained, sudden onset of polydypsia, polyphagia, increased urinary frequency, and moderate weight loss. Patient denies pain on urination or blood in urine, change in stream, renal infection, or any recent changes in physical activity.</p></td></tr><tr><td colspan="6"><p>Tonsillectomy at age 2. Medications include variable use of OTC pain medications, including aspirin and Ibuprofin. No known medicine allergies, hypertension, pulmonary, thyroid, or kidney disease. Last clinic visit over 4 years ago for an employment physical, which was unremarkable.</p></td></tr><tr><td colspan="6"><p><u>1100</u></p></td></tr><tr><td colspan="6"><p>— +</p></td></tr></table>						OHx	OPx	OROS	OOrd	OLab	OProg	Patient History						<p>Sudden, unexplained increase in thirst and appetite accompanied by abnormally frequent urination and weight loss of 2 pounds, starting approximately one month ago.</p>						<p>The patient is a 31 y/o moderately obese white male who presented with a one month history of unexplained, sudden onset of polydypsia, polyphagia, increased urinary frequency, and moderate weight loss. Patient denies pain on urination or blood in urine, change in stream, renal infection, or any recent changes in physical activity.</p>						<p>Tonsillectomy at age 2. Medications include variable use of OTC pain medications, including aspirin and Ibuprofin. No known medicine allergies, hypertension, pulmonary, thyroid, or kidney disease. Last clinic visit over 4 years ago for an employment physical, which was unremarkable.</p>						<p><u>1100</u></p>						<p>— +</p>					
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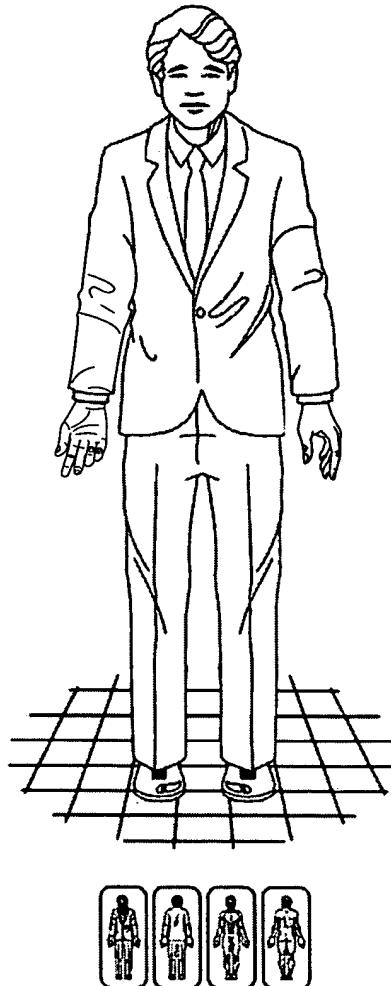


FIG. 11

1200

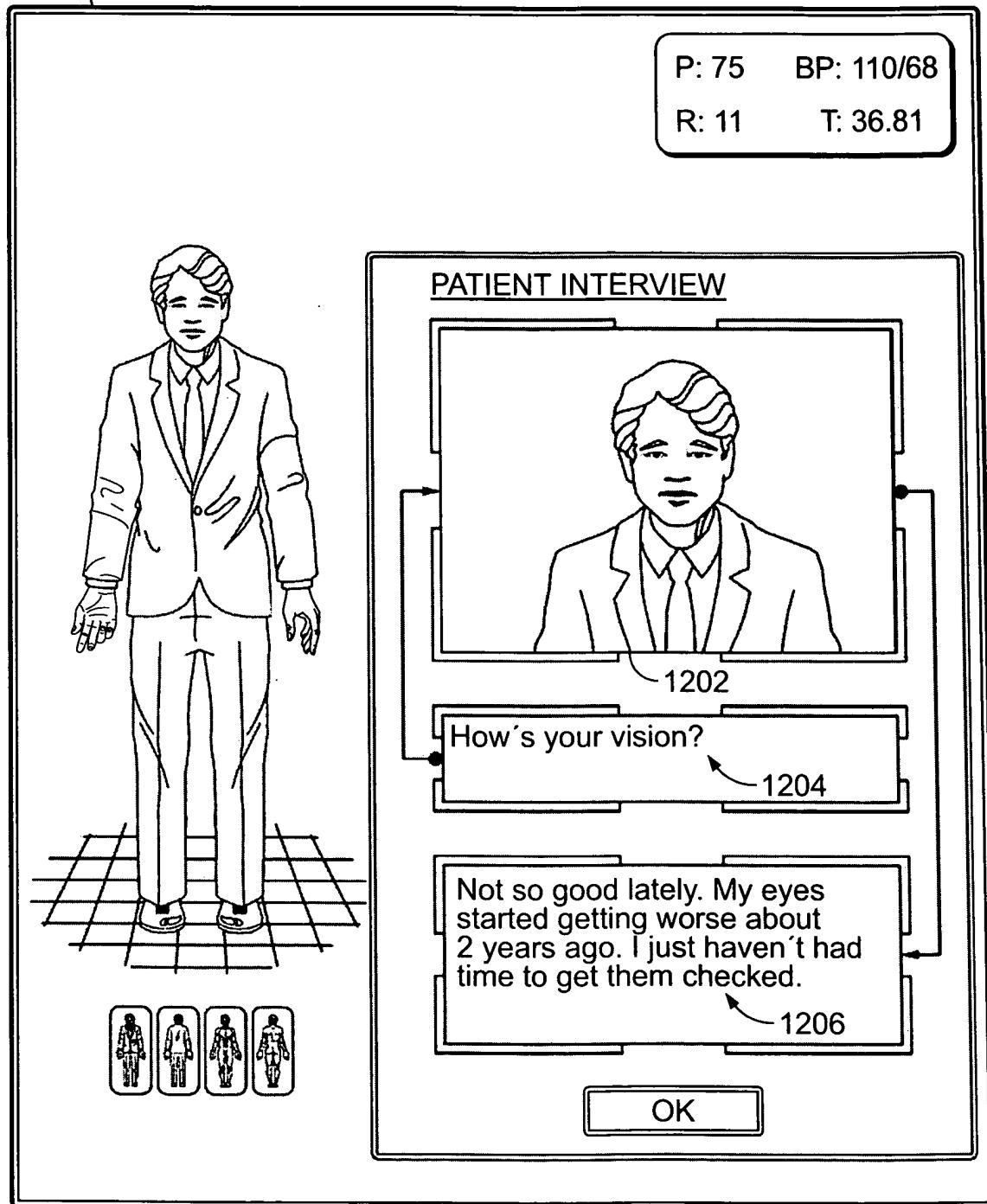
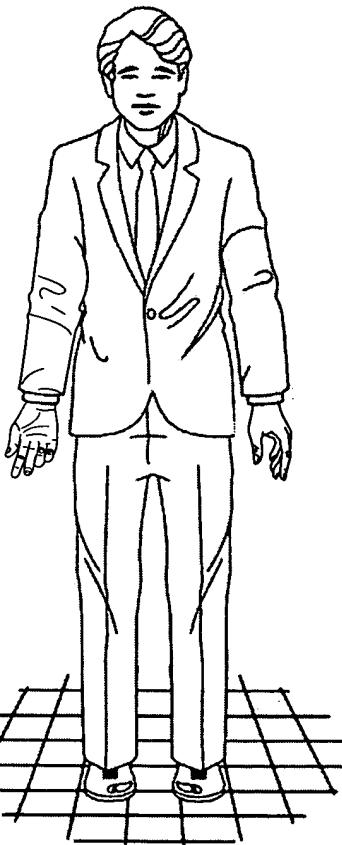


FIG. 12

1300

P: 75	BP: 111/69
R: 11	T: 36.92



Order Entry

DDx

- Acromegaly
- Acute myocardial infarction
- Acute pericarditis ~ 1302
- Ankylosing spondylitis
- Arthritis associated with ulcerative colitis
- Aseptic necrosis of bone

Rx

- Cimetidine (Tagamet)
- Codeine
- Diabenase ~ 1304
- Diazepam (Valium)
- Diclofenac (Voltaren)
- Diet & Exercise
- DMSO
- Doxorubicin

Labs/Studies

- ABG
- Acetone
- ACT ~ 1306
- ACTH
- Albumin, Serum
- Albumin, Urine
- Alkaline Phosphatase
- Ammonia
- Amylase

OK

FIG. 13

P: 85	BP: 116/72
R: 9	T: 37.25

Time Control

Initial: Wed, 01/05/00 14:24
Current: Wed, 01/05/00 18:37
Elapsed (weeks/days/hours/minutes):

0 0 4 13

Time Slice Time Jump

Set Time Slice (1 Minutes)

Seconds
 Minutes
 Hours
 Days
 Weeks

Stop Time Restart OK Cancel

FIG. 14

```

1502 { Object Model Key "Patient Views"
      { Object Model MMFile1 "Body Renderings\MorphMan\aprime.jpg"
        Object Model MMFile2 "Body Renderings\MorphMan\bprime.jpg"
        Object Model MMFile3 "Body Renderings\MorphMan\cprime.jpg"
        Object Model MMFile4 "Body Renderings\MorphMan\dprime.jpg"

1504 { Object Model Key "ROS Head"
      { Object Model MMFile1 "Body Renderings\MFaces\Neutral.jpg"

1506 { Object ABD Key "Front Auscultation"
      { Object ABD MMFile "Body Renderings\New_Male_Fat\FatChBkMAus.jpg"
        Object ABD Sound1 "Wav Files\Other\Bowel1.wav"
        Object ABD Sound2 "Wav Files\Other\Bowel2.wav"
        Object ABD Sound3 "Wav Files\Other\Bowel3.wav"
        Object ABD Sound4 "Wav Files\Other\Bowel2.wav"

1508 { Object ABD Key "Front Percussion"
      { Object ABD MMFile "Body Renderings\New_Male_Fat\FatChBkMPpercuss.jpg"
        Object ABD Sound1 "Wav Files\Percussion\PercusDull.wav"
        Object ABD Sound2 "Wav Files\Percussion\PercusDull.wav"
        Object ABD Sound3 "Wav Files\Percussion\PercusFlat.wav"
        Object ABD Sound4 "Wav Files\Percussion\PercusFlat.wav"
        Object ABD Sound5 "Wav Files\Percussion\PercusResonant.wav"
        Object ABD Sound6 "Wav Files\Percussion\PercusResonant.wav"
        Object ABD Sound7 "Wav Files\Percussion\PercusDull.wav"
        Object ABD Sound8 "Wav Files\Percussion\Exclame.wav"
    }
}

```

FIG. 15A-1

1510 { Object Chest Key "Front Auscultation"
Object Chest MMFile "Body Renderings\New_Male_Fat\FatChBkMAus.jpg"
Object Chest Sound1 "Wav Files\Heart Sounds\Normal (A).wav"
Object Chest Sound2 "Wav Files\Heart Sounds\Normal (P).wav"
Object Chest Sound3 "Wav Files\Heart Sounds\Normal (T).wav"
Object Chest Sound4 "Wav Files\Heart Sounds\Normal (M).wav"

1512 { Object Chest Key "Back Auscultation"
Object Chest MMFile "Body Renderings\New_Male_Fat\FatChBkMAus.jpg"
Object Chest Sound1 "Wav Files\Breath Sounds\NormBSApex.wav"
Object Chest Sound2 "Wav Files\Breath Sounds\NormBSApex.wav"
Object Chest Sound3 "Wav Files\Breath Sounds\NormBSBase.wav"
Object Chest Sound4 "Wav Files\Breath Sounds\NormBSBase.wav"
Object Chest Sound5 "Wav Files\Breath Sounds\NormBSBase.wav"
Object Chest Sound6 "Wav Files\Breath Sounds\NormBSBase.wav"

1514 { Object Chest Key "Back Percussion"
Object Chest MMFile "Body Renderings\New_Male_Fat\ChBkMPercuss.jpg"
Object Chest Sound1 "Wav Files\Percussion\PercusResonant.wav"
Object Chest Sound2 "Wav Files\Percussion\PercusResonant.wav"
Object Chest Sound3 "Wav Files\Percussion\PercusResonant.wav"
Object Chest Sound4 "Wav Files\Percussion\PercusResonant.wav"
Object Chest Sound5 "Wav Files\Percussion\PercusResonant.wav"
Object Chest Sound6 "Wav Files\Percussion\PercusResonant.wav"
Object Chest Sound7 "Wav Files\Percussion\PercusFlat.wav"
Object Chest Sound8 "Wav Files\Percussion\PercusFlat.wav"

FIG. 15A-2

1516 { Object CV Key "EKG"
Object CV MMFile1 "EKGs\Normsinr.jpg"
Object CV Entry "Normal sinus rhythm with no signs of past or current cardiac events."

1518 { Object Ext Key "Extremities - Left Hand"
Object Ext MMFile1 "Extrem\MNLLHand.jpg"
Object Ext Entry "Left hand normal to inspection."

1520 { Object Ext Key "Extremities - Right Hand"
Object Ext MMFile1 "Extrem\MNRHand.jpg"
Object Ext Entry "Right hand normal to inspection."

FIG. 15A-3

1522 { Object Ext Key "Extremities - Feet"
Object Ext MMFile1 "Extrem\ExtremFeet.jpg"
Object Ext Entry "Feet normal to inspection."

1524 { Object Heent Key "Eyes Exam"
Object Heent MMFile1 "Pupils\NormEyes.jpg"
Object Heent Entry "Pupils equal, round, and reactive to light."
Object Heent Description "Pupils equal, round, and reactive to light."

1526 { Object Heent Key "Retinal Exam"
Object Heent MMFile1 "Eye Exam\MorphRetSmall\a.jpg"
Object Heent Entry "Normal retinal exam."
Object Heent Description "Retinal Exam."

1528 { Object Heent Key "Tympanic Membranes"
Object Heent MMFile1 "Ear Exam\NormalEarBi.jpg"
Object Heent Entry "Tympanic membranes intact, no signs of fluid bilaterally."
Object Heent Description "..."

1530 { Object Heent Key "Throat Exam"
Object Heent MMFile1 "Throat\Throat_hu.jpg"
Object Heent Entry "Throat is free of lesions"
Object Heent Description "No lesions, tongue midline, no active carries, mild periodontal disease."

FIG. 15B-1

1532 { Object Neuro Key "Speech Pattern"
Object Neuro MMFile1 "Wav Files\Speech\MSpeechN.wav"
Object Neuro Entry "Normal speech pattern."
Object Neuro Description "Click button to hear speech"

1534 { Object Neuro Key "Gait"
Object Neuro MMFile1 "Gait\MNGaitC.avi"
Object Neuro Entry "Normal gait."

1536 { Object Rad Key "Chest Film"
Object Rad MMFile1 "CXRs\NormalMale.jpg"
Object Rad Entry "Chest film normal. Trachea midline. No interstitial opacities."

1538 { Object Rad Key "Skull Film"
Object Rad MMFile1 "CXRs\NormalSkull.jpg"
Object Rad Entry "Skull film unremarkable. No masses or lesions visualized."

FIG. 15B-2

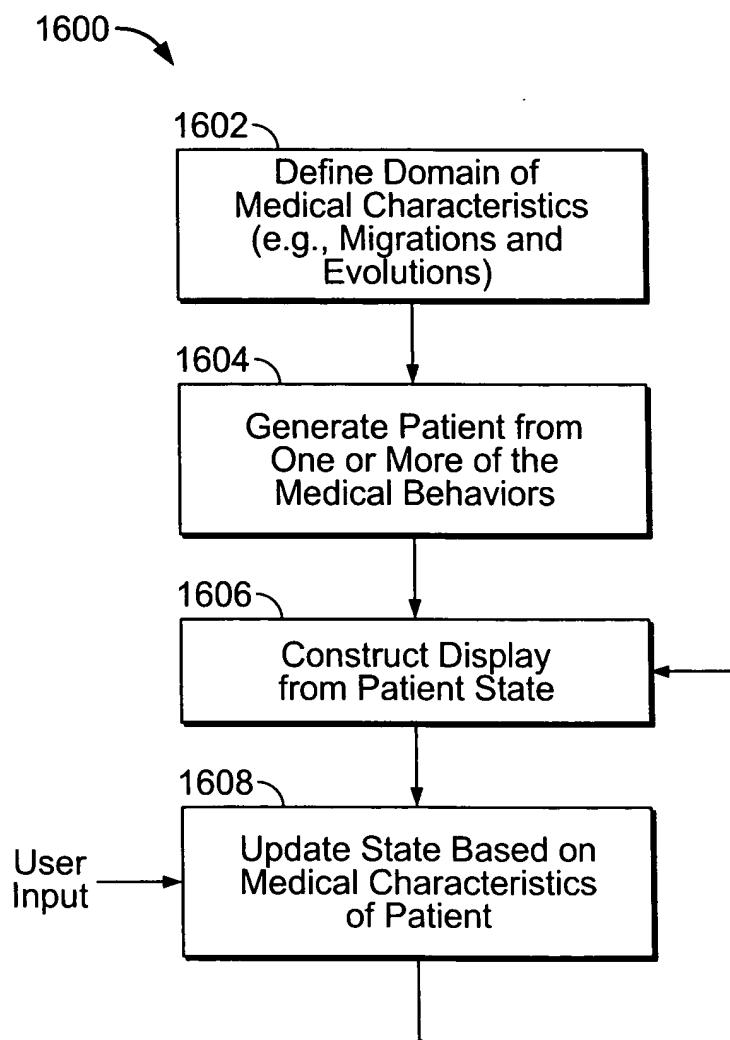


FIG. 16

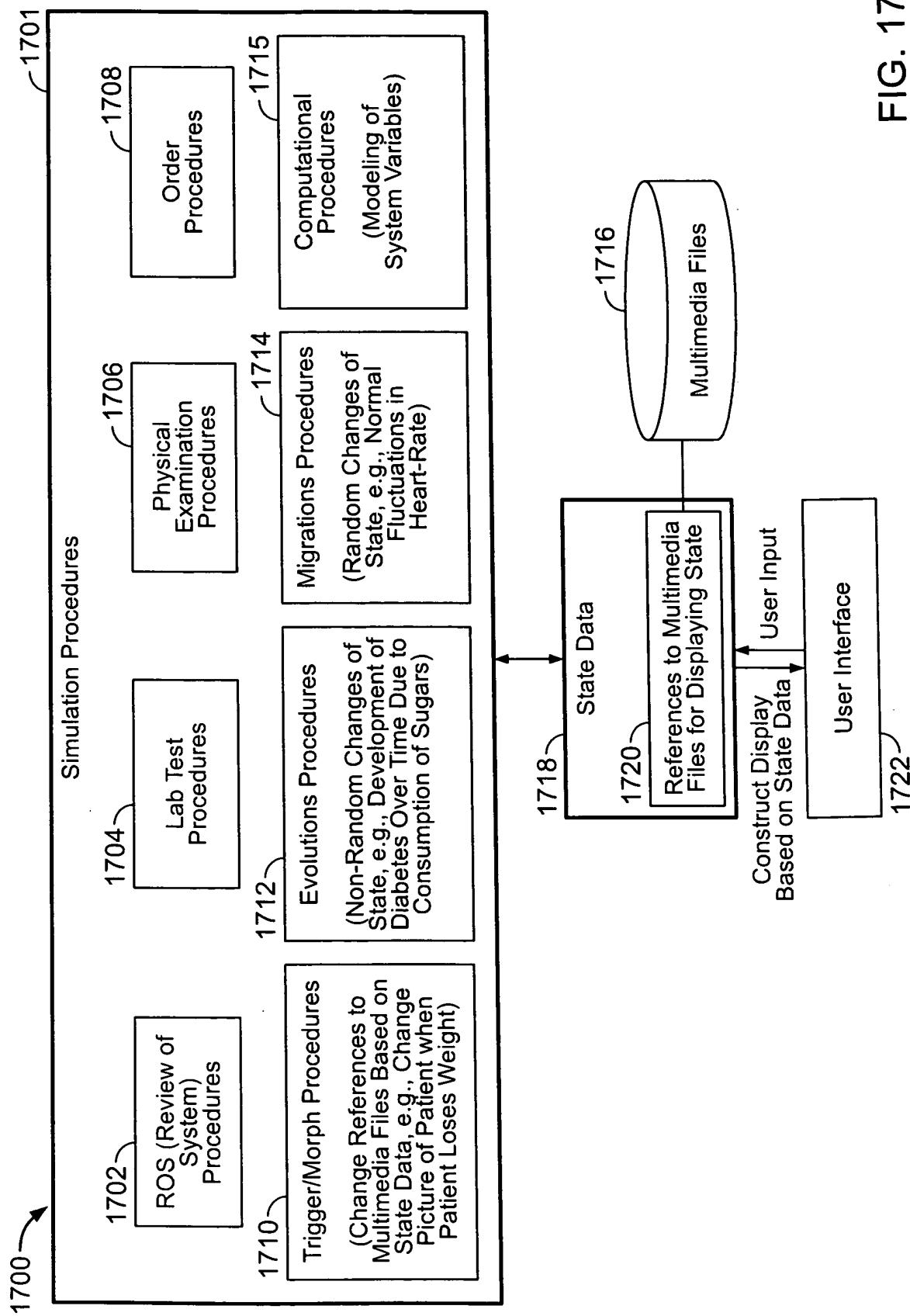


FIG. 17

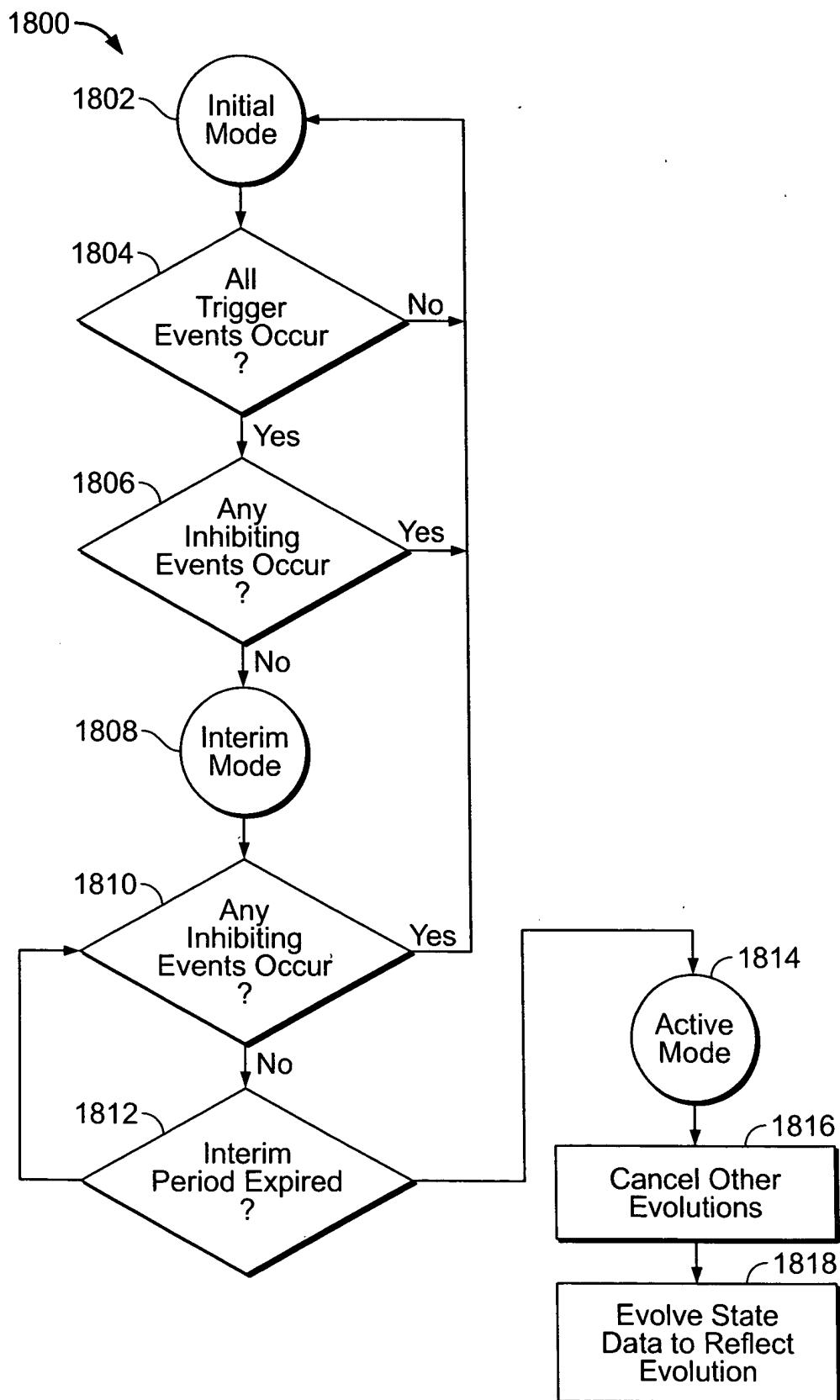


FIG. 18

1900 →

Evolution
1902 {
 Name "Diet & Exercise"
 Number_Trigger_Events 1
 Trigger_Type Action
 Trigger_Index "Diet & Exercise"

1904 {
 Number_Initial_Inhibiting_Events 1
 Initial_Inhibiting_Event_Type Evolution_Started
 Initial_Inhibiting_Event_Index "Diet & Exercise"
 Initial_Inhibiting_Event_Value 1

1906 {
 Interim_Mode_Time 4
 Interim_Mode_Units Days

1908 {
 Number_Interim_Inhibiting_Events 0
 Number_Evolutions_to_Cancel 0

 Number_Evolving_Variables 4

1910a {
 Variable_to_Evolve "Vital_Weight"
 Importance 4
 Target_Multiple 0.90
 Target_Increment 1
 Target_Variance 1
 Time 62
 Time_Units Days
 Time_Variance 2
 Curve_Index 1
 Evolve_Variance 2

FIG. 19A

1910b { Variable_to_Evolve "Glucose, Fasting"
Importance 3
Target_Multiple 0.90
Target_Increment 1
Target_Variance 1.5
Time 52
Time_Units Days
Time_Variance 1
Curve_Index 1
Evolve_Variance 1.25

1910c { Variable_to_Evolve "Glucose, Plasma"
Importance 5
Target_Multiple 0.95
Target_Increment 1
Target_Variance 1.25
Time 42
Time_Units Days
Time_Variance 1
Curve_Index 1
Evolve_Variance 1.45

1910d { Variable_to_Evolve "Glucose, 2h Postprandial"
Importance 2
Target_Multiple 0.95
Target_Increment 1
Target_Variance 1.25
Time 42
Time_Units Days
Time_Variance 1
Curve_Index 1
Evolve_Variance 1.75

End_Evolution

FIG. 19B

2000 →

Migration
Name "ACT"
Comment "Activated clotting Time"
Units "s"
Variable "ACT"
Start 143 }
Min 114 } 2002
Max 186 }
Time_Step 1 }
Time_Unit Minutes } 2004
Variance 0.4 } 2006
Time_Jump 2
End_Migration

FIG. 20

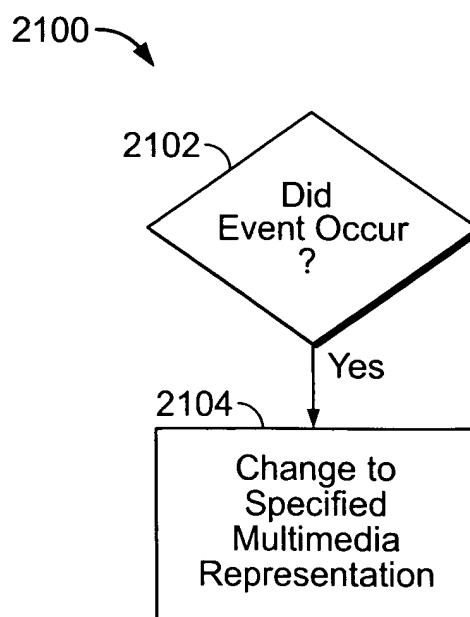


FIG. 21

```
Object Chest Key      "Back Percussion"
Object Chest MMFile   "Body Renderings\New_Male_Fat\ChBkMPpercuss.jpg"
}
}2202
}
}2204
}
}2206

Trigger
Name "ChangeBackPercussion"
Object Chest Sound1 "Back Percussion"
Variable_Index "Weight"
Min 100
Max 120
Object_String ""Body Renderings\New_Male_Slim\ChBkMPpercuss.wav""
```

FIG. 22

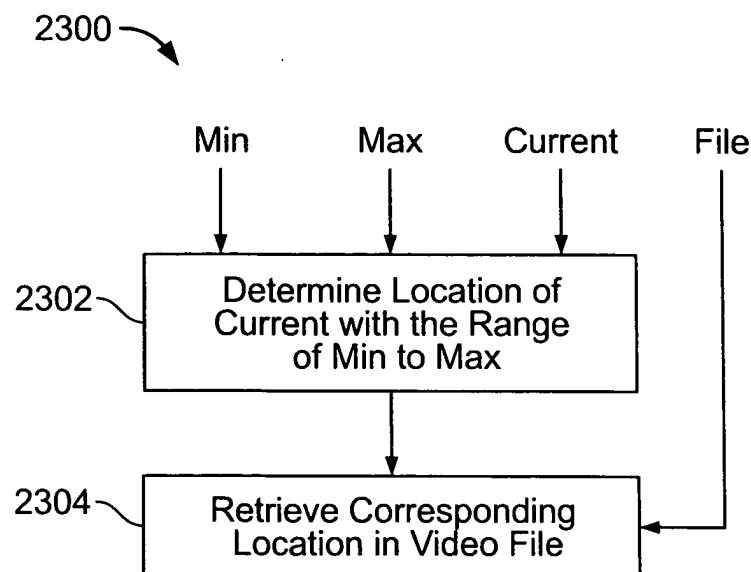


FIG. 23

```
Morph
Name "vital_weightM"
Comment "No Comment"
Variable "vital_weight"
Min 164.0
Max 184.0
End_Morph
```

FIG. 24

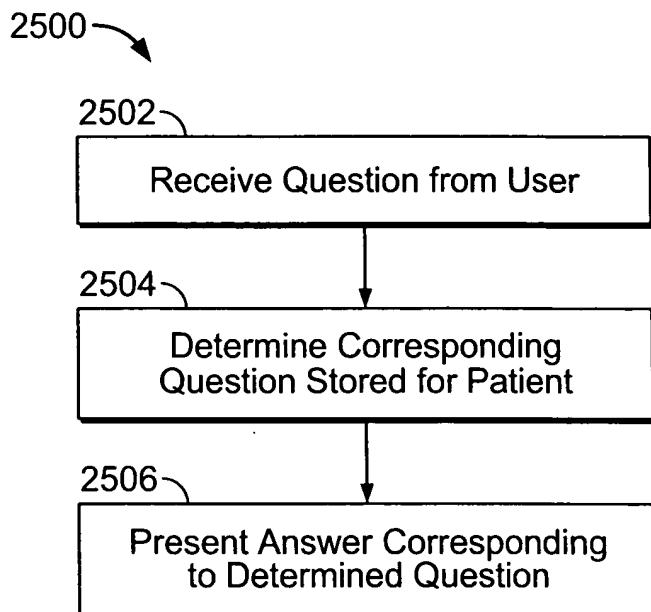


FIG. 25

Object ROS Question "Have you felt fatigued?"
Object ROS Answer "Well, I do find myself more tired at the end of the day lately, even though my job hasn't changed in years."
Object ROS Keywords "tire, fatigue, letharg"
Object ROS Entry "Fatigued at the end of the day."
Object ROS MMFile1 "Body Renderings\FFaces\sullen.jpg"

FIG. 26

Object Lab Test "Acetone"

Object Lab Description "No migration - Neg/Pos"

Object Lab Entry "Neg/Pos"

FIG. 27

Object Order Action "Acarbose"

Object Order Description "Oral Antidiabetic - Precose"

Object Order Entry "Given to patient PO; tolerated well"

FIG. 28

Object Physical Key "Oral Temperature"

Object Physical Text "Oral Temperature: \$temperature\$"

FIG. 29

COMPUTATION

Name "Vital_BP_Diastolic"

Comment "no comment"

Units "mmHG"

Variable "Vital_BP_Diastolic"

Method_Name "ComputeBPDiaStolic"

Number_Arguments 1

Argument_Variable "Vital_BP_Systolic"

Variance 2

End_Computation

FIG. 30

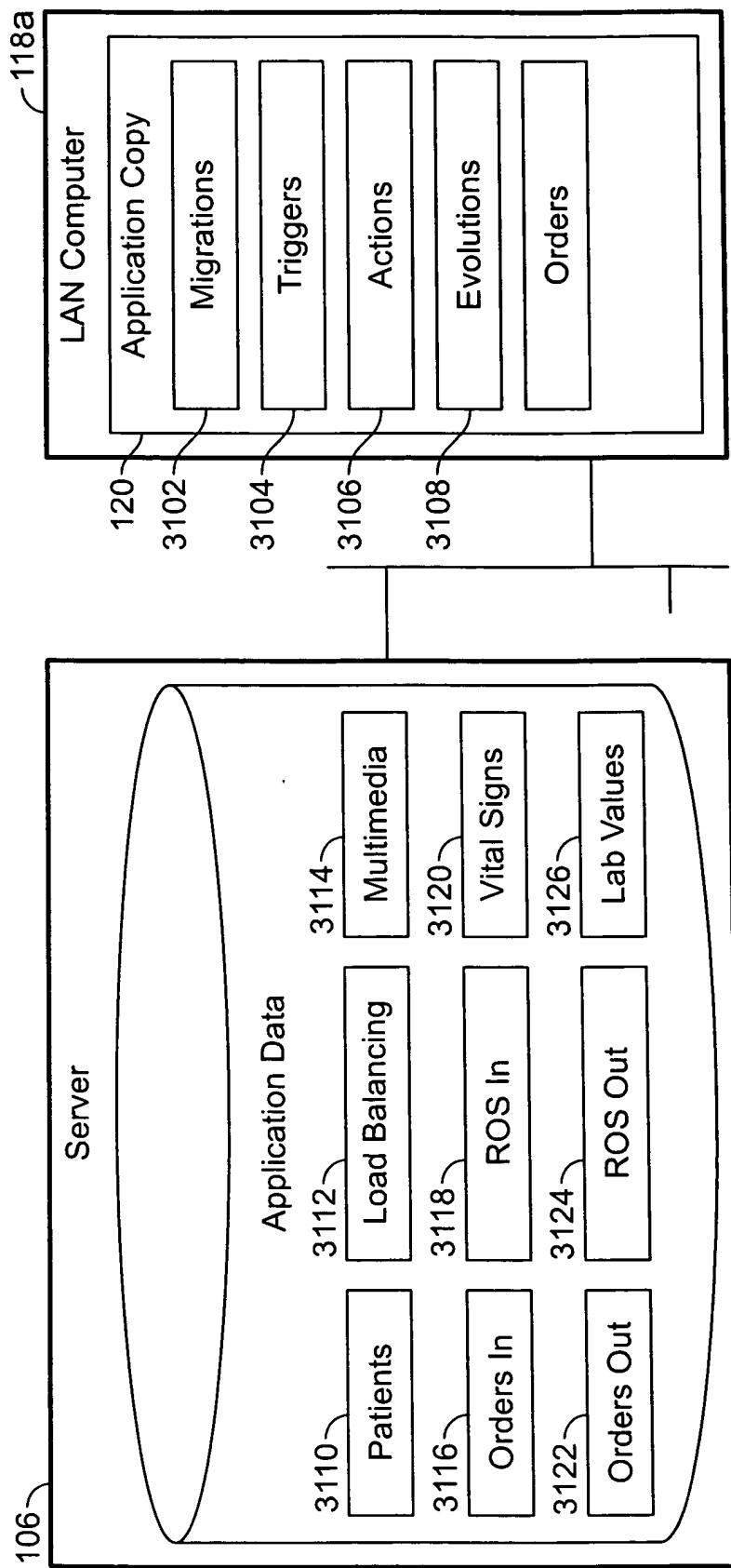


FIG. 31